

Art Unit: 1731  
Docket No.: 11728/4

1731

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : J. SUGAWARA et al.  
Serial No. : 10/019,752  
Filed : December 27, 2001  
For : BLACK CERAMIC SINTER WITH LOW THERMAL  
EXPANSION AND HIGH SPECIFIC RIGIDITY AND  
PROCESS FOR PRODUCING THE SAME

Assistant Commissioner  
for Patents  
Washington, D.C. 20231

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TRANSMITTAL LETTER

SIR:

Transmitted herewith is an Amendment/Response in the  
above-identified patent application.

[X] No additional fee is required.

The fee has been calculated as shown below.

SMALL ENTITY						OTHER THAN A SMALL ENTITY	
CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDIT. OR FEE	RATE	ADDIT. FEE	
TOTAL 19 MINUS 20 = 0			x9 =	\$	x18 =	\$ 0.00	
INDEP. 3 MINUS 3 = 0			x40 =	\$	x84 =	\$ 0.00	
[ ] FIRST PRESENTATION OF MULTIPLE			x135 =	\$	x280 =	\$ 0.00	
DEP. CLAIM			TOTAL				
			ADDIT. FEE	\$	OR	\$ 0.00	

[X] The Commissioner is hereby authorized to charge fees under 37 CFR  
1.16 and 1.17 which may be required to Deposit Account 11-0600.  
A duplicate of this paper is enclosed.

[ ] A petition for a \_\_\_\_ ( ) month extension of time and Deposit  
Account authorization to cover the extension fee are enclosed.

I hereby certify that this correspondence is being deposited with  
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envelope addressed to: Assistant Commissioner for Patents,  
Washington, D.C. 20231 on April 25, 2002

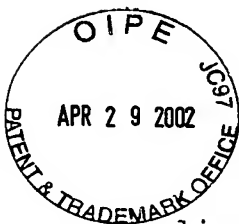
John J. Kelly, Jr.  
John J. Kelly, Jr. Reg. No. 29,182

Respectfully submitted,  
KENYON & KENYON

By: John J. Kelly, Jr.  
John J. Kelly, Jr.  
Reg. No. 29,182

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on April 25, 2002

John J. Kelly Reg. No.: 29,182



Art Unit : 1731  
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#5  
Revised  
5-8-02  
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Assistant Commissioner for Patents  
Washington, D.C. 20231

SECOND PRELIMINARY AMENDMENT

Sir:

Please amend the specification of the above-identified patent application as follows.

Please replace the paragraph appearing at page 5, lines 13-25 with the following new paragraph.

The silicon carbide sintered body has been commercially available as a black ceramic substance. JP-A-08-310,860 discloses a black zirconia ceramic sintered body, JP-A-04-50,161 a method for the production of a high rigidity black alumina sintered body, and JP-A-06-172,034 a black silicon nitride sintered body, respectively. Though these sintered bodies are black, their thermal expansion coefficients at room temperature are  $2.3 \times 10^{-6}/^{\circ}\text{C}$

B<sup>1</sup>  
in the sintered body of silicon carbide,  $7 \times 10^{-6}/^{\circ}\text{C}$  in that of zirconia,  $5.3 \times 10^{-6}/^{\circ}\text{C}$  in that of alumina, and  $1.3 \times 10^{-6}/^{\circ}\text{C}$  in that of silicon nitride. Thus, these sintered bodies are incapable of realizing a low thermal expansion coefficient aimed at this invention.

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